DOCKET NO.: UNMC-0030 (63124US)

Application No.: 09/647,911

Office Acti n Dated: March 4, 2003

PATENT

REMARKS/ARGUMENTS

The Official Action dated March 4, 2003 and the references cited therein have been

carefully reviewed. In view of the amendments presented herewith and the following

remarks, favorable reconsideration and allowance of this application are respectfully

requested.

Status of the prosecution:

At the outset, the examiner's attention is directed to the Associate Power of Attorney

and Change of Correspondence Address enclosed herewith. The examiner is requested to

forward all correspondence to Applicants' undersigned attorney at the new address.

Claims 1-15 are pending in this application. Claims 4-7 have been withdrawn from

consideration. The March 4, 2003 Official Action is a first action on the merits.

Claims 1-3 and 8-14 stand rejected under 35 U.S.C. §102(b) as allegedly anticipated

by Walker et al., J. Virol. Dec. 1995, pp. 8173-8177.

Claim 15 stands rejected under 35 U.S.C. §102(b) as allegedly anticipated by Baker et

al., J. Gen. Virol. (1995) Vil. 76, No. 8, pp. 2081-2084.

Amendments presented in this paper:

Claim 1 has been amended to incorporate the limitation found in original claim 9,

canceled herein. Claim 8 is also canceled herein.

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For the reasons set forth below, Applicants assert that the claim amendments submitted herewith overcome each of the rejections issued in the March 4, 2003 Official Action, and that the claims as amended are in condition for allowance.

Claims 1-3 and 8-15 are novel over the cited references.

In order to be properly raised in a rejection under 35 U.S.C. §102, a reference must disclose each and every limitation set forth in the rejected claims. The claims as presently amended call for a virus genome that produces an attenuated virus, which comprises at least one *pol* gene modification that causes the polymerase to have increased fidelity as compared with a polymerase from a virus genome that does not comprise the *pol* gene modification, wherein the increased fidelity results in a decreased reversion rate from attenuated virus to non-attenuated virus.

Both Walker et al. and Baker et al. disclose polioviruses having mutations in the *pol* gene. However, neither reference discloses that such mutations cause the polymerase to have increased fidelity as compared with an equivalent non-mutated genome, resulting in a decreased reversion rate from attenuated to non-attenuated virus. Indeed, Walker et al. disclose that certain of the mutations described therein reverted to wildtype (see Abstract). Baker et al. disclose that the attenuation observed in Sabin-type strains of poliovirus was likely due to alterations in the initiation of RNA chain synthesis, which is a different mechanism from increased fidelity of transcription.

Thus, neither Walker et al. nor Baker et al. identically disclose the invention as presently claimed, which specifically calls for a *pol* gene modification that results in increased fidelity of the encoded polymerase. Accordingly, neither Walker et al. nor Baker et Page 5 of 6

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al. can be said to anticipate the invention. Withdrawal of the rejections of claims 1-3 and 8-

15 under 35 U.S.C. §102(b) is therefore requested.

Conclusion.

In view of the amendments submitted herewith and the foregoing remarks, the

presently pending claims are believed to be in condition for allowance. Applicants

respectfully request early and favorable reconsideration and withdrawal of the rejections set

forth in the March 4, 2003 Official Action, and allowance of this application.

Respectfully submitted,

PATENT

Date: June 4, 2003

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